

merated, and atrophy of the optic nerve of the tabic origin, there being cases in which the latter is present, with no disturbances of sensibility of the eye-ball and surrounding parts. On the other hand, these disturbances may be present in a tabetic subject without the co-existence of optic atrophy. 2. The presence of the disturbances of sensibility and localization, above enumerated, found in a case of atrophy of the optic nerve, point to a tabetic origin of the atrophy. MACALASTER.

Cerebellar Heredo-Ataxia.—Under the above head, Dr. Pierre Marie has published two papers in French medical journals; he first described and named the morbid syndrome, after putting together and interpreting several observations of his own and of Fraser, Sanger, Brown, Nonne, and Kleppel and Durante.

Paul Londe has recently recorded two cases of the same disease, collected few new observations, and published on the subject a monograph of 250 pages, "Heredo-Ataxic Cerebelleuse, Paris, 1895." The disease is a hereditary and family disease, one or more of the ascendants being neurotic and ataxic; more than one of a family also being affected in the same way. It is an ataxic disease, being attended with inco-ordination of movements and a staggering gait. It is also believed to be a cerebellar disease, the ataxia and inco-ordination being referred to a definite lesion of the lesser brain, viz., atrophy of the cerebellar cortex, or more particularly, of the cells of Purkinje. There have, however, been too few well-conducted autopsies to warrant very positive conclusions, though enforced by physiological considerations. The following observation of Londe and Brissaud brings out the salient points of this morbid syndrome: Patient, German, 24 years old; married; is of a neurotic family; died with some nervous diseases attended with trembling. Patient's brothers and sisters all "nervous; one is affected like her. For a year patient has had some difficulty in walking, especially in the dark. On presenting herself at the clinic it was noticed that she staggers.

Walks with head bent forward to see where to place her feet. A swinging pelvic gait (*elle marche du bassin*).

In the standing posture the oscillations of the trunk are constant; not increased by shutting eyes. With eyes open patient cannot stand on one foot. The head oscillates in rotation or flexion, especially when patient is under strong emotion. The speech is thick, jerky, a monotone. Exaggerated buccal contractions (as at angles of mouth) during articulation; no trembling of tongue; nystagmus when patient is looking intently; general inco-ordination, even in arms, which are agitated with choreiform movements when she is standing or walking; shoulder jerks; cannot with eyes open touch tip of nose with finger; some intentional trembling of hands; cannot do needle work or other fine work; muscular sense is intact; realizes position of limbs; has sense of weight of objects, etc., but motion of equilibrium is lost. When she walks it seems to her that she is "too light," that her feet cannot support the body. Instinctively clings to something to support her. Floor seems soft, and gives way under her.

Patellar and wrist reflexes normal; plantar reflex *nil* to tickling; contact is perceived. There is a double dorso-lumbar curvature of the spine.

Negative signs.—Absence of the Argyll-Robertson sign; absence of paresis of ocular muscles; absence of contractures; absence of vertigo and diplopia; absence of fulgurating pains; no difficulty of deglutition; no trouble with sphincters; no visual troubles; intellect only a little weakened; patient is easily fatigued.

She has been rheumatic and hysterical (*grandes crises* twice).

The vertebral deviation and the ataxia began with the pregnancy and accouchment in 1891; from that date were first noted the staggering gait, the oscillations of the head, the tremblings of the hands, etc.

Patient has been treated by suspension, baths, nitrate of silver, "point de feu" along the vertebral column, but without any benefit.

The following case is given by Fraser: A. K., newspaper carrier, aged 30 years. When seen for the first time by the author, in 1869, he staggered like a drunken person. *Debut* in childhood; disease came on gradually. First symptom noticed, an uncertainty in the gait. At the age of seven years the staggering became more persistent; child was taken from school. In 1875 an attack of typhoid fever, from which made good recovery. In 1876, was obliged to abandon occupation; would often fall headlong when about his work; had to lean against objects for support.

Typical appearance.—Marked titubation; body bent forward; head thrown backward; oscillates continually, as though it was too heavy. The eyeballs are the seat of oscillation without true nystagmus; generally turned up and to one side; internal strabismus of right eye; articulation of words slow, guttural, hesitating. When in a sitting position, no trembling nor choreiform movements, except of the head; intentional trembling when he attempts to write; has some difficulty in touching the tip of his nose when eyes are shut; Romberg sign absent. Patient died of tuberculosis June 11, 1879.

Autopsy.—Pulmonary phthisis, cavities; pneumothorax; liver, kidneys, spleen amyloid; cerbrum and cord normal; the cerebellum is very small, and is only half the normal size, 8r grammes instead of 160 grammes. Section shows the white substance apparently normal, but gray matter diminished in thickness; deep vacuoles in the fissures, and representing little cysts of the pia mater; Purkinje's cells diminished in number, extending to less than the normal depth; nuclei absent.

A sister, aged 24 years, of the above patient, is similarly affected. The same clinical picture; onset in childhood; can no longer write; difficulty in walking; is afraid that she will fall on her face; the act of reading is very fatiguing; for four years has not dared to go out alone; eyes oscillate; fixation painful; internal strabismus of right eye during the convergence of the eyes; pupils sluggish; no achromatopsia; speech slow, hesitating; no mental trouble. On lying down, when she places her head on a horizontal plane, she has vertigo, says that there are flashes in her eyes, and that she can no longer see the clock before her. At this moment she does not dare to turn her head and has a sensation of nausea.

Ophthalmoscopic examination of both patients by Dr. Read: Papillæ pale, irregular in their contour, with veins engorged in certain points; arteries contracted; opaque and thick aspect of the choroid.

Family and hereditary data.—The father healthy, but given to drink; a maternal aunt feeble-minded; nine children, five are dead; two of convulsions, one of phthisis; the brother above mentioned was the last; one of the living sisters, married, had convulsions in childhood, and has lost an infant with meningitis.

To sum up: These two cases present a sufficiently clear clinical picture. Inco-ordination of upper and lower extremities, dating from infancy; paresis of right external rectus; commencement of papillary atrophy; troubles of speech; instability of the eyeball, without true nystagmus; staggering gait, and propensity to fall forward; atrophy of cerebellum; diminution in thickness of the gray substance with cysts of the pia mater; diminution in number of the cells of Purkinje; alteration of these structures in form, and of the surrounding stroma.

HURD.

Cerebral Hæmorrhage as a Sequel of Enterocolitis.—

Emerson (*Medical Record*, April 20, 1895), reports the case of a child, five months old, who had been fed for six weeks on sterilized milk and most of that time had suffered from more or less diarrhœa. After this the food was changed several times, but the stools continued loose, and